

REMARKS

In response to the above-identified Office Action, Applicant amends the application and seeks reconsideration thereof. In this response, Applicant amends claims 8 and 15. Applicant does not cancel any claims or add any new claims. Accordingly, claims 8-10, 12-17 and 19-21 are pending.

I. Claims Rejected Under 35 U.S.C. §103(a)

Claims 8-10, 14-17 and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,015,281 issued to Nagata, et al. (hereinafter "Nagata") in view of U.S. Patent No. 5,990,516 issued to Momose, et al. (hereinafter "Momose").

In order to establish a *prima facie* case of obviousness, the Examiner must show that each element of a claim is taught or suggested by the combined references. In regard to claims 8 and 15, these claims include the elements of first and second dielectrical materials being scalable for a set of feature sized technologies where the set of feature size technologies are defined by gate length in the range of 25-70 nm. The Examiner admits in Paper No. 22 that Nagata does not teach feature sized technologies defined by a gate length in the range of 25-150nm. Thus, Nagata does not teach a first and second dielectrical material that are scalable for a set of feature size technologies in the range of 25-70 nm. Momose does not cure this defect of Nagata. The Examiner has not identified and Applicant has been unable to discern any part of Momose that teaches or suggests a first and second dielectric material that is scalable for a set of feature size technologies defined by a gate length in the range of 25 to 70nm. Therefore, Nagata, in view of Momose does not teach or suggest a first and second dielectric material being scalable for a set of feature size technologies defined by a gate length in the range of 25 to 70 nm.

Further, the Examiner states that Nagata teaches a first dielectric silicon dioxide (SiO_2) and a second dielectric aluminum oxide (Al_2O_3). See Page 2 of Paper No. 22. However, SiO_2 is not taught by Nagata to be scalable over a set of feature size technologies having a gate length between 25 and 70 nm. Nagata teaches that the minimum thickness of SiO_2 is 100 Å. See col. 5, lines 4-16. Dielectric layers scalable over gate lengths of 25-70 nm have thicknesses in the range of 3 to

75Å. See Table I, page 11 of specification. Momose does not cure this defect of Nagata. The Examiner has not indicated and Applicant has been unable to discern any part of Momose that teaches or suggests a first and second dielectrical layer that is scalable over a set of feature size technologies defined by a gate length in the range of 25 to 70 nm. Therefore, Nagata, in view of Momose does not teach or suggest each of the elements of claims 8 and 15. Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 8 and 15 are requested.

In regard to claims 9, 10, 14, 16, 17 and 21, these claims depend from independent claims 8 and 15 and incorporate the limitations thereof. Thus, at least for the reasons mentioned in regard to claims 8 and 15, these claims are not obvious over Nagata in view of Momose. Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 9, 10, 14, 16, 17 and 21 are requested.

Claims 12, 13, 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagata in view of Momose and further in view of U.S. Patent No. 6,005,274 issued to Gardner, et al. (hereinafter "Gardner").

Claims 12, 13, 19 and 20 depend from independent claims 8 and 15 and incorporate the limitations thereof. Thus, at least for the reasons mentioned in regard to claims 8 and 15, Nagata and Momose do not teach or suggest each of the elements of these claims. In regard to claims 12 and 19, the Examiner has failed to indicate any part of the cited references that teaches or suggests the first gate dielectric material is selected from one of HfO₂, ZrO₂, BaO, La₂O₃ or Y₂O₃ as claimed in claims 12 and 19. Applicant has twice brought this to the attention of the Examiner in previous responses yet, the Examiner has failed to indicate any part of the cited references that teaches these elements of claims 12 and 19. Thus, the Examiner has failed to establish a *prima facie* case of obviousness for claims 12 and 19. Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 12 and 19 are requested.

Further, Gardner does not cure the defects of claims 13 and 20. The Examiner has not indicated and Applicant has been unable to discern any part of Gardner that teaches or suggests first and second dielectrical materials scalable for a set of feature size technologies defined by gate

length in the range of 25 to 70 nm. Thus, Nagata, in view of Momose and Gardner does not teach or suggest each of the elements of these claims. Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 13 and 20 are requested.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely claims 8-10, 12-17 and 19-21 patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207 3800.

Respectfully submitted,

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Dated: May 27, 2003


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5-27-03
May 27, 2003